

**Abstract of the Disclosure**

An automatic gain control circuit with a very wide operational range, less hardware, and faster response, and more flexibility includes a signal strength estimator, a gain adjusting factor device and a multiplier. After the signal strength estimator finds signal strength, the gain adjusting factor device will generate a gain adjusting factor corresponding to the signal strength. Then the multiplier will update gain by multiplying it the gain adjusting factor.

20221016045001